COMMONWEALTH OF MASSACHUSETTS

HEALTH POLICY COMMISSION

CHART Phase 2: Implementation Plan Emerson Hospital

HPC approval date: September 15, 2015

Last modified: December 29, 2016

Version: 6

Introduction

This Implementation Plan details the scope and budget for Emerson Hospital's ("Contractor") Award in Phase 2 of the Health Policy Commission's (HPC) Community Hospital Acceleration, Revitalization, and Transformation (CHART) Investment Program. The Implementation Plan is incorporated by reference into and is subject to the requirements of the Phase 2 Award Contract, including the Phase 2 Terms & Conditions.

Many capitalized terms appearing in the Implementation Plan are defined in the Phase 2 Terms & Conditions or the Phase 2 Request for Proposals (RFP). In addition to capitalized terms, the Implementation Plan may include other acronyms and/or abbreviations whose meaning is understood by Contractor and the HPC in the context of the Implementation Plan. If there is disagreement concerning the meaning of a term, acronym, or abbreviation, the HPC's interpretation shall govern.

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Key personnel

Name	Title	CHART Phase 2 Role
Christine C. Schuster	President and Chief Executive Officer	
C. Gregory Martin, MD	Senior Vice President Clinical Affairs and Chief Medical Officer	Clinical Investment Director
Joyce Welsh	Vice President Patient Care Services and Chief Nursing Officer	Operational Investment Director
Georgia Feuer	Project Manager	Project Manager
Allan Curtis	Manager of Financial Planning and Analysis	Financial Designee

Target population

Definition

- All med/surg/BH* patients at a high risk of readmission**

Quantification

- 3,080 discharges per year out of 6,646 discharges in 2014

*All behavioral health disorders (ICD-9 290-319)

**Target population definition includes all payers and ages 18+ (excluding OB, deaths, transfers to acute inpatient, and discharge to acute rehab), inpatient or observation status, with one or more of the following qualifications:

- A high risk principal diagnosis (cancer, stroke, diabetes mellitus, COPD, heart failure, AMI, pneumonia, current substance abuse, end stage renal failure)
- ≥3 hospitalizations in a 6 month period
- ≥2 hospitalizations in a 30 day period
- Discharged from Emerson to palliative or hospice care within 6 months prior to hospitalization
- Discharged from Emerson to homecare or a SNF within 60 days prior to hospitalization

Aim Statement

Primary Aim Statement
Reduce 30-day returns by 20% for all med/surg/BH patients with a high risk of readmission by the end of the 24 month Measurement Period.

Secondary Aim Statements*
Reduce 30-day returns by 10% among patients with a high risk of readmission discharged to a SNF, by the end of the 24 month Measurement Period.
Reduce 30-day ED returns by 10% for all med/surg/BH patients with a high risk of readmission by the end of the 24 month Measurement Period.

*Your secondary aim statements are performance measures only and are not tied to Achievement Payment.

Baseline performance

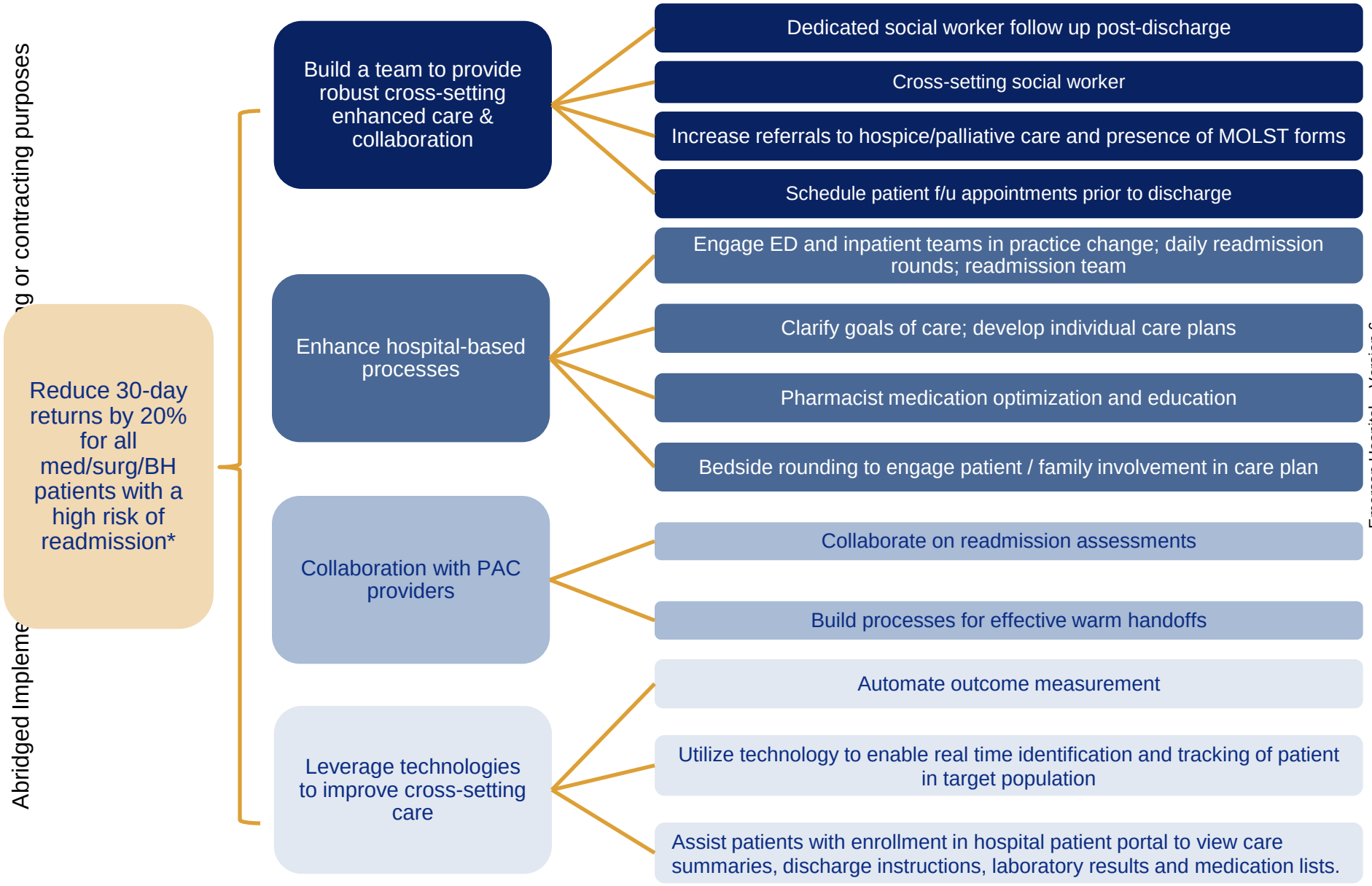
		Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14	Nov 14	Dec 14	Avg.
Hospital-Wide	Returns	78	58	68	62	61	48	74	52	43	68	59	65	61
	Discharges	629	502	574	597	563	503	590	512	490	575	525	586	554
	Rate (%)	12%	12%	12%	10%	11%	10%	13%	10%	9%	12%	11%	11%	11%
Target Pop	Returns	49	41	41	45	40	31	47	34	29	41	39	48	40
	Discharges	281	232	243	288	271	237	284	242	226	254	227	295	257
	Rate (%)	17%	18%	17%	16%	15%	13%	17%	14%	13%	16%	17%	16%	16%

Estimated monthly impact

	Current Expected Served	Current Expected	New Expected Avoided Events	New Expected Events
30-day returns reduction	257	0.16 * 257 = 41	0.2 * 41 = 8	41 – 8 = 33

Estimate of impact: 96 per year
Value estimate 96 * $10,000 = $.96M *2 = $1.92M
Award Ratio $1.92M/$1.2M = 1.6

Driver Diagram



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*Target population definition includes all payers and aged 18+; excluding OB, deaths, transfers to acute inpatient, and discharge to acute rehab

Service model

Narrative description
1. **SNF Team:** Work collaboratively with area SNFs to review readmissions. Begin doctor to doctor warm handoffs when feasible for high risk patients and individual plans for readmission prevention. Improve care transition processes and communication between SNFs and Emerson Hospital. 2. **Readmissions Team:** Monitor and develop strategies around causes of readmissions. SW/CM meet with all readmissions and perform readmission assessment utilizing assessment tool. Daily readmission rounds with hospitalist and PACs (if appropriate). Interdisciplinary team will meet regularly to review assessments, monitor trends, and improve processes. 3. **Pharmacist:** To perform medication reconciliation at admission and discharge and educate high risk patients as needed. 4. **Bedside Rounding Team:** Daily team rounding of high risk patients at bedside Tuesday through Friday with a focus on early discharge planning. F/u appointments scheduled prior to discharge and f/u calls made to patients after discharge. Team will also develop individualized contingency care plans for use in the ED, if patient returns. 5. **On-site Minuteman (community agency) Social Worker:** Provide consults in the ED and on the floors. After discharge, works with patients in the community to ensure community resources are in place. Assesses frail adults in the community. Also collaborates with outpatient care managers for coaching of high risk patients in their service line. 6. **Palliative/Hospice team:** Work with Care Dimensions (community agency) on high risk patients needing goals of care conversations. Increase palliative care and hospice referrals through education and high risk criteria. Increase MOLST completion and increase HCP development. 7. **BH Aftercare Team:** Decrease readmissions for high risk psychiatric patients and med/surg patients with comorbid psychiatric issues by following them in the community after discharge. The BH outreach team will consist of a full time (.8 FTE) Licensed Clinical Social Worker (LCSW). The BH Outreach Team will call patients within 3 days of discharge and follow their progress for two weeks, scheduling appointments for patients, serving as a liaison between other providers and community resources, and potentially making home visits. This service will be available Mon-Fri. 8. **ED Team:** Will lead a variety of initiatives aimed at preventing ED admissions from becoming inpatient admissions. These will include: Implementing care plans that can be viewed at ED admission, involving Minuteman in appropriate cases, improving communication processes with SNFs and homecare.

Service worksheet

Service Delivered

- Care transition coaching x
- Case finding x
- Behavioral health counseling x
- Engagement x
- Follow up x
- Transportation x
- Meals x
- Housing x
- In home supports x
- Home safety evaluation
- Logistical needs
- Whole person needs assessment x
- Medication review, reconciliation, & delivery x
- Education x
- Advocacy x
- Navigating x
- Peer support x
- Crisis intervention
- Detox x
- Motivational interviewing (PHO)
- Linkage community services x
- Physician follow up x
- Adult Day Health

Personnel Type

- Hospital-based nurse x
- Hospital-based social worker x
- Hospital-based pharmacist x
- Hospital-based NP/APRN
- Hospital-based behavioral health worker
- Hospital based psychiatrist
- Community-based nurse
- Community-based social worker x
- Community-based pharmacist
- Community-based behavioral health worker
- Community-based psychiatrist
- Community-based advocate
- Community-based coach x
- Community-based peer
- Community agency x
- Physician x
- Palliative care x
- EMS
- Skilled nursing facility x
- Home health agency x

Service Availability

- Mon. – Fri. x
- Weekends
- 7 days
- Holidays
- Days x
- Evenings
- Nights
- Off-Shift Hours

Service mix

Service	By Whom	How Often	For How Long
Post hospital care for high risk patients	Minuteman Ambulatory SW	As needed	30 days post discharge and as needed
Hospice/Palliative care	Care Dimensions RN	As needed	Per protocol
Post discharge follow up appointments and Patient Portal enrollment assistance; program assistance	Administrative Coordinator	All high risk patients prior to discharge	1 encounter
Aftercare Team	SW	All inpatient psychiatric CHART patients, med/surg patients through referral from provider	14 days
Coordination and management of the CHART 2 Project	Project Manager	40 hours per week	Duration of the project
Onsite patient advocate for CHART cohort	Patient Navigator	1 FTE	Hiring for year 2
Follow patients in the community post-discharge and provide consultation for CHART team	Care Transition Nurse	.75 FTE	Year 2
Medication reconciliation and counseling	Pharmacists	All high risk inpatients and as needed	During inpatient encounter and as needed post d/c for counseling

# FTE/units of service hired at my organization	**Pharmacist (1) + Staff Pharmacists devoting approximately 6 hours per week+ Patient Navigator (1) + SW (.8) + Administrative Coordinator (1.0 in year 1 and 0.1 in year 2) + Project Manager (1) + Care Transition Nurse in year 2 (.75)**
# FTE/units of service contracted	**Minuteman = 1 FTE. 1 FTE RN on-site from Care Dimensions**

List of service providers/community agencies

Type of Service Provider	Community Agency Name	New or Existing Relationship
Senior Services	Minuteman Senior Services	New
Senior Services	MA Senior Care	New
Home Care	Emerson Home Care	Existing
SNF	Rivercrest, Walden, Life Care of Acton, Life Care of Nashoba Valley, Concord Healthcare, Emerson Transitional Care Unit	Existing
Pharmacy	Acton Pharmacy, CVS	New
Hospice/Palliative Care	Care Dimensions Hospice/Palliative Care	New
Medicare	Healthcentric Advisors	New
Behavioral Health	Arbour – HRI Counseling, Marlboro Hospital PHP, Westwood-Pembroke Hospital PHP, Baldpate Hospital PHP	New

Summary of services

Service and staffing mix

At Inpatient Admission:

- Patient identified using criteria. Added to daily CHART report and real-time flag created in Care Management system

In Hospital:

- Bedside, multidisciplinary daily rounding
- Establish readmission team, cross-setting team, standard process for reviewing readmissions
- If BH comorbidity, notify the BH Aftercare Team
- Pharmacist med optimization
- Assess for goals, MOLST, develop care plan if needed, refer to palliative care if indicated
- Ensure appointments are made, medications are able to be afforded and obtained
- Warm handoff to SNF if applicable
- Portal enrollment

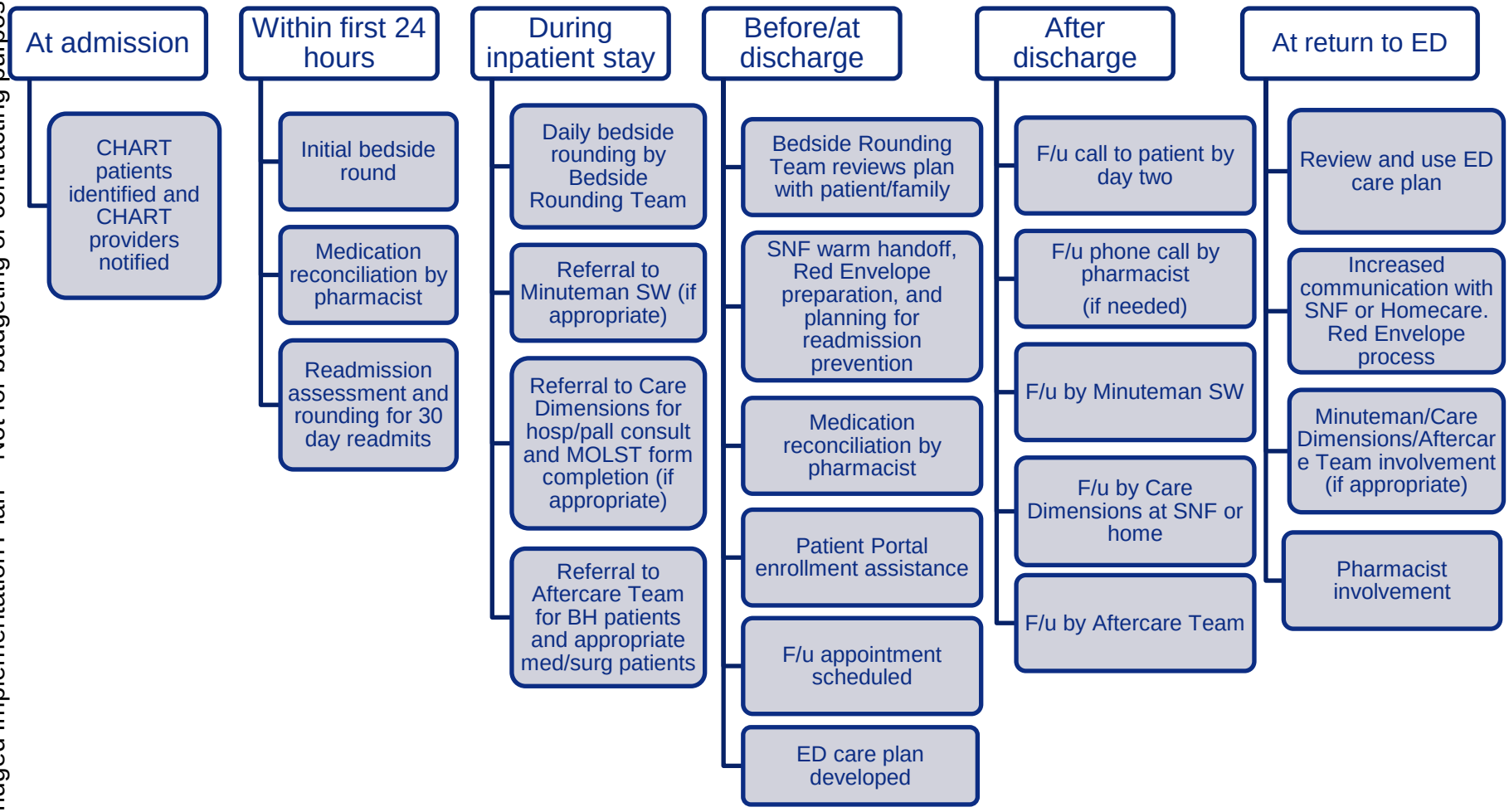
Following Discharge:

- Follow up phone call <48h
- Follow up by pharmacist, SW, palliative care as needed
- BH patients with NP/SW outreach follow up x 2 week

At return to ED:

- Flag in ED EMR
- Refer to individual care plan to guide decision-to-admit
- Work with PAC to treat-and-return, when appropriate
- SW evaluation for safe discharge

Summary of services



Cohort-wide standard measures – Hospital utilization

Data elements	All	Target Population
1. Total Discharges from Inpatient Status (“IN”)	x	x
2. Total Discharges from Observation Status (“OBS”)		
3. SUM: Total Discharges from IN or OBS (“ANY BED”)	x	x
4. Total Number of Unique Patients Discharged from “IN”	x	x
5. Total Number of Unique Patients Discharged from “OBS”		
6. Total Number of Unique Patients Discharged from “ANY BED”	x	x
7. Total number of 30-day Readmissions (“IN” to “IN”)	x	x
8. Total number of 30-day Returns (“ANY BED” to “ANY BED”)	x	x
9. Total number of 30-day Returns to ED from “ANY BED”	x	x
10. Readmission rate ("IN readmissions" divided by "IN")	x	x
11. Return rate (ANY 30-day Returns divided by “ANY BED”)	x	x

Standard exclusions: <18, OB (DRG 765-782), discharged deceased or transfer to acute hospital

Note: Data elements that do not have a population selected are not required for measurement. Not all measures are required for all hospitals.

Cohort-wide standard measures – ED utilization

Data Elements	All	Target Population
12. Total number of ED visits		
13. Total number of unique ED patients		
14. Total number of ED visits, primary BH diagnosis		
15. Total number of unique patients with primary BH diagnosis		
16. Total number of ED visits, *any* BH diagnosis		
17. Total number of unique patients with any BH diagnosis		
18. Total number of 30-day ED revisits (ED to ED)		
21. ED revisit rate	x	x

Standard exclusions: <18, OB (DRG 765-782), discharged deceased or transfer to acute hospital

Note: Data elements that do not have a population selected are not required for measurement. Not all measures are required for all hospitals.

Cohort-wide standard measures – Service delivery

Data elements	Target Population
27. Total number of unique patients in the target population	x
28. Number of acute encounters for target population patients	x
29. For acute encounters in measure #28, number of these with any CHART service provided after discharge and within 48 hours	x
30. Total number of contacts for the target population	x
31. Average number of contacts per patient served	
32a. Min number of contacts for patients served	
32b. Max number of contacts for patients served	
33. Number of units of service provided by service modality (including, e.g., phone call, virtual interaction, face to face in office, face to face in home, etc.)	x
34. Number of units of service provided, by service types (e.g., care coordination, medication optimization, clinical care, counseling, needs assessment, etc.)	x
35. Number of units of service provided, by role type (NP, LICSW, Pharmacist, Community Health Worker, Peer)	x
36. Average time (days, months) enrolled in CHART program per patient	
37. Range time (days, months) enrolled in CHART program per patient	
38. Proportion of target population patients with care plan	

Standard exclusions: <18, OB (DRG 765-782), discharged deceased or transfer to acute hospital

Note: Data elements that do not have a population selected are not required for measurement. Not all measures are required for all hospitals.

Cohort-wide standard measures – Payer mix

Data elements	Medicare	Medicaid	Commercial
39. Count of patients in the Target Population	x	x	x

Standard exclusions: <18, OB (DRG 765-782), discharged deceased or transfer to acute hospital

Note: Data elements that do not have a population selected are not required for measurement. Not all measures are required for all hospitals.

Program-specific measures

Measure Definition	Numerator	Denominator
Total Discharges to Home Health	Count of the number of IN discharges for the target population that were discharged to home health	N/A
Total Discharges to Home	Count of the number of IN discharges for the target population that were discharged to home	N/A
# of CHART patients with PCP appointment scheduled before discharge	Count of the number of IN/OBS discharges for the target population with a PCP appointment scheduled prior to discharge	N/A
% of CHART ED visits that become inpatient admissions	Count # of IN/OBS discharges for target population	Count # of ED visits for target population
# of orders placed for hospice and palliative care	Count the number of hospice and palliative orders placed for the target population	N/A
# of visits with follow up by a Care Transitions Social Worker	Count the number of IN/OBS discharges for target population that received follow up care by a Care Transitions Social Worker	N/A
Readmission from SNF	Hospitalizations within 30 days of inpatient discharge to a SNF	Total Discharges to SNF [see above]

Continuous improvement plan (1 of 2)

1. How will the team share data?	Each subgroup will meet at least monthly to review reports and processes. Relevant reports for each subgroup will be generated shortly before each meeting. A selection of these reports will also be reviewed monthly by Emerson's CHART Leadership Team.
2. How frequently will you (PM, Investment Director) look at the data (e.g., weekly)?	Under our current system, generating reports requires manual input from IT, so most reports would only be done monthly. If Medisolv software is purchased and implemented, the PM will generate and review select reports weekly.
3. How often will your executive team (VPs, C-suite) review CHART project reporting (e.g., monthly)?	The CHART Leadership Team will meet 1-2 times per month. They will choose which reports they want to receive regular updates on and the PM will bring the latest version of those reports to each meeting.
4. How often will your front line CHART staff (SW, care team) review reporting (e.g., weekly)?	Monthly, at regularly scheduled staff meetings.
5. How often will your community partners review data (e.g., weekly, monthly)?	Our community partners will receive copies of the latest reports at monthly meetings.
6. Which community partners will look at CHART data (specific providers and agencies)?	Care Dimensions, Minuteman Services, Walden Rehab, Lifecare of Acton, Lifecare of Nashoba, Concord Health Care, Rivercrest, Healthcentric Advisors, Emerson Homecare, Emerson TCU
7. Will the quality committee of your board review CHART reporting (e.g., quarterly)?	Quarterly, or more frequently if requested.

Continuous improvement plan (2 of 2)

8. Who will collect measures and produce reporting for Cohort-wide and program specific measure (e.g., Data Analyst, PM, ID)?	**Cohort-Wide**	**Program specific**
	Data Analyst	PM
9. What is your approximate level of effort to collect these metrics?	**Cohort-Wide**	**Program specific**
	40 hours to set up, 16 hours/month to run	40 hours to set up, 16 hours/month to run. Possibly more in the beginning, as we will want more frequent reports.
10. How will you ensure that you are able to collect both your program specific and the cohort-wide measures?	We are developing builds within our electronic medical record for collecting data. For situations where we cannot pull metrics from our record currently, we are adding fields to request exactly what we want to measure.	
11. How will you know when to make a change in your service model or operational tactics?	Each intervention has a planning team that will meet at least monthly to review processes and data. If the team finds a problem, it will assess the cause and make changes.	

Enabling Technologies plan

Functionality	User	Vendor	Cost
Medisolv data reporting software, including training	PM, Data analyst, Quality specialist	Medisolv	$116,265, including software, license, maintenance, and training
Development of ad hoc reports and flagging capability in Care Management Allscripts	PM, Care Managers	Allscripts	$12,474

Enabling Technologies plan – Q&A

How are you going to identify target population patients in real-time?

- At inpatient admission, an automated process will check each patient against our CHART criteria. If the patient meets the criteria, his/her name and medical record number will be sent either by e-mail or to a printer where it will be seen by CHART providers. Additionally, a report will go out to care management, pharmacy, nursing, and the hospitalists each morning listing all CHART patients currently on inpatient or observation status. If a CHART patient returns to the ED at any time within the 2 year grant period, she/he will be automatically flagged as a CHART patient within our ED medical record system.

How will you measure what services were delivered by what staff?

- Services will be recorded in our Meditech EMR in a notes field or in a designated assessment. We will build reports showing the number and author of these notes for each CHART patient. We also have specific process measures identified for each of our CHART initiatives.

How will you measure outcome measures monthly?

- We will develop reports that can pull outcome data from Meditech and run these reports monthly. With Medisolv, these reports would be automated.

What tool/platform will you use to facilitate cross-setting and multi-disciplinary coordination of care?

- We will continue to use our Allscripts Care Management referral module to communicate with SNFs and Homecare.

Where will individual care plans reside, and what is the plan for making them available on a need-to-know basis 24/7 in the ED, hospital, and ambulatory settings?

- We will be developing acute care plans while the patient is admitted. These care plans will be entered into Meditech and attached to the CHART patient flag in our ED system. Whenever the patient returns to the ED, the provider will be able to view the acute care plan.

Do you have a method for identifying what clinical services your target population accesses?

- We share ED/Admission and Discharge notifications as well as their corresponding reports to the PCPs in our community. We interface this information to PCPs in the Emerson PHO
- We send Daily notifications via secure email to our other key PCP groups not in the PHO - Atrius/Harvard Vanguard Concord and Acton Medical Associates.

Other essential investments

Other Investments	Budget Required
Contract with Minuteman Services	$168,037

Key dates

Key milestone	Date
Launch date (beginning of your 24 month Measurement Period)	10/1/2015
Post jobs	Complete
All staff hired	Complete
Execute contracts with service delivery partners	Minuteman done
Execute contract with Medisolv	10/1/2015
Execute contract with Allscripts	Complete
Initiatives support 50% of planned patient capacity	Complete
Initiatives support 100% of planned patient capacity	Complete
Medisolv Implementation Starts	10/31/2015
First Submission of Cohort data from Medisolv	1/15/2016
Training on Medisolv completed	1/15/2016
Bedside rounds training	Complete
CHART program communication plan completed	10/30/15
First CHART patient identified	Complete - 5/12/15
First behavioral health patient seen	Complete - 8/25/15
First acute care plan written	11/1/15
Completion of CHART program handbook (subject to revisions throughout program)	12/15/15

Community partners/subcontractors

Name	Business Address	Website	Contact Name	Contact Title	Contact Phone Number	Contact Email Address
Minuteman Senior Services	26 Crosby Dr, Bedford, MA 01730	Minutemansenior.org	Leslie May-Chibani	Assistant Director	(781)221-7096	L.May-Chibani@minutemansenior.org
Care Dimensions	75 Sylvan St., Danvers, MA 01923	Caredimensions.org	Lyn Skarmeas	VP of Provider Relations	978-882-5819	lskarmeas@caredimensions.org
Medisolv, Inc.	10440 Little Patuxent Parkway Suite 1000 (Tenth Floor) Columbia, MD 21044	http://medisolv.com	Andy Haslam	Vice President of Sales	240-485-7489	
Iatrics Systems, Inc.	27 Great Pond Drive Boxford, MA 01921	http://new.iatric.com/	Julia Courtney	Account Manager	978-805-4182	